

Title (en)

METHODS FOR FORMING FIBER-REINFORCED STRUCTURES WITH SEGMENTS FORMED FROM DIFFERENT TYPES OF FIBER

Title (de)

VERFAHREN ZUR HERSTELLUNG VON FASERVERSTÄRKTNEN STRUKTUREN MIT SEGMENTEN AUS VERSCHIEDENEN ARTEN VON FASERN

Title (fr)

PROCÉDÉS DE FORMATION DE STRUCTURES RENFORCÉES PAR FIBRE AYANT DES SEGMENTS FORMÉS À PARTIR DE DIFFÉRENTS TYPES DE FIBRE

Publication

EP 2790547 A4 20150826 (EN)

Application

EP 12858301 A 20120926

Priority

- US 201161569714 P 20111212
- US 2012057394 W 20120926

Abstract (en)

[origin: US2013147330A1] Fiber-reinforced structures for use in forming support structures and electronic device housing members may include multiple types of fiber. A first portion of the structures formed from a first type of fiber such as glass fiber may be radio transparent. A second portion of the structures formed from a second type of fiber such as carbon fiber may be more rigid than the first type of fiber and may be radio opaque. The second portion of the structures may be used to selectively add strength to the fiber-reinforced structures. The first portion of the structures may be used to maintain radio transparency for compatibility with wireless electronic device operations. The fiber-reinforced structures may be formed by rolling a sheet of prepreg material that includes a first area with the first type of fiber and a second area with the second type of fiber.

IPC 8 full level

A45C 11/00 (2006.01); **B29C 63/00** (2006.01); **H04B 1/38** (2015.01)

CPC (source: EP US)

A45C 11/00 (2013.01 - EP US); **B29C 70/302** (2021.05 - EP US); **G06F 1/1616** (2013.01 - US); **G06F 1/1626** (2013.01 - EP);
G06F 1/1656 (2013.01 - EP US); **G06F 1/1698** (2013.01 - EP); **H04B 1/3888** (2013.01 - EP US); **H04M 1/185** (2013.01 - EP US);
H05K 5/03 (2013.01 - US); **H05K 13/00** (2013.01 - US); **A45C 2011/003** (2013.01 - EP US); **A45C 2013/025** (2013.01 - US);
B29L 2031/3481 (2013.01 - EP US); **G06F 1/1628** (2013.01 - US); **G06F 2200/1633** (2013.01 - EP US); **Y10T 29/4998** (2015.01 - EP US)

Citation (search report)

- [XII] US 2009179806 A1 20090716 - JI GANG [JP], et al
- [I] US 2011117872 A1 20110519 - TSENG CHIEH-FU [TW]
- See references of WO 2013089880A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2013147330 A1 20130613; CN 103974644 A 20140806; EP 2790547 A1 20141022; EP 2790547 A4 20150826; JP 2015503245 A 20150129;
JP 5783654 B2 20150924; KR 20140102244 A 20140821; TW 201325388 A 20130616; TW I516191 B 20160101; WO 2013089880 A1 20130620

DOCDB simple family (application)

US 201213711489 A 20121211; CN 201280060780 A 20120926; EP 12858301 A 20120926; JP 2014547224 A 20120926;
KR 20147017167 A 20120926; TW 101136088 A 20120928; US 2012057394 W 20120926